CLAIMS

1. Process for the synthesis of the compound of formula (I):

$$H$$

$$CO_{2}H$$

$$H_{3}C$$

$$SO_{2}Et$$

$$CO_{3}Et$$

$$(I)$$

and its pharmaceutically acceptable salts,

characterised in that a compound of formula (II):

wherein R represents a hydrogen atom or a benzyl or linear or branched (C₁-C₆)alkyl group,

is reacted with a compound of formula (III) having the (R) configuration:

$$H_3C$$
 Cl
(III)

wherein G represents a chlorine, bromine or iodine atom or a hydroxy, p-toluenesulphonyloxy, methanesulphonyloxy or trifluoromethanesulphonyloxy group, in the presence of a base,

to yield a compound of formula (IV):

$$\begin{array}{c} H \\ \downarrow \\ H \\ CO_2R \\ G \end{array} \qquad (IV)$$

wherein R and G are as defined hereinbefore,

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which is reacted with the compound of formula (V) having the (S) configuration :

$$H_2N$$
 CH_3 (V)

to yield, after deprotection where necessary, the compound of formula (I).

- 2. Synthesis process according to claim 1, characterised in that the base used for the reaction between the compounds of formulae (II) and (III) is an organic amine selected from triethylamine, pyridine and diisopropylethylamine, or a mineral base selected from NaOH, KOH, Na₂CO₃, K₂CO₃, NaHCO₃ and KHCO₃.
- 3. Synthesis process according to claim 1, characterised in that G represents a chlorine or bromine atom, or a p-toluenesulphonyloxy, methanesulphonyloxy or trifluoromethanesulphonyloxy group.
- 4. Synthesis process according to claim 3, characterised in that the reaction between the compounds of formulae (IV) and (V) is carried out in the presence of an organic amine selected from triethylamine, pyridine and diisopropylethylamine, or of a mineral base selected from Na₂CO₃, K₂CO₃, NaHCO₃ and KHCO₃.

- 5. Synthesis process according to claim 1, characterised in that G represents a hydroxy group.
- 6. Synthesis process according to claim 5, characterised in that the reaction between the compounds of formulae (IV) and (V) is carried out in the presence of an activation reagent selected from N-methyl-N-phenyl-aminotriphenylphosphonium iodide, and hexamethylphosphorus triamide together with ammonium perchlorate, or, when R is other than a hydrogen atom, by Mitsunobu reaction.
- 7. Compound of formula (IV):

$$\begin{array}{c} H \\ \downarrow \\ H \\ H_3C \end{array} \qquad \begin{array}{c} CO_2R \\ G \end{array} \qquad \begin{array}{c} (IV) \\ \end{array}$$

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wherein R represents a hydrogen atom or a benzyl or linear or branched (C1-C6)alkyl group and G represents a chlorine atom or a p-toluenesulphonyloxy or methanesulphonyloxy group.

8. Process according to any one of claims 1 to 6 for the synthesis of perindopril in the form of its tert-butylamine salt.